Applicant: Bernard Moss et al. Attorney's Docket No.: 12804-027001

Serial No.: 10/646,628 Filed: August 22, 2003

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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

## 1-30. (Canceled)

- 31. (Currently amended) A method of inducing a CD8+ T cell immune response to an HIV Env, Gag or Pol antigen in a primate, the method comprising:
- (a) administering to the primate a composition comprising a nucleic acid encoding at least one antigen selected from: [[HIV]] <u>HIV-1</u> gag, [[HIV]] <u>HIV-1</u> Pol and at least the gp120 protein and the membrane-spanning domain <u>and</u> ectodomain of the gp41 protein of [[HIV]] <u>HIV-1</u> Env; and
- (b) after administering the nucleic acid to the primate, administering to the primate a composition comprising recombinant MVA virus expressing [[HIV]] HIV-1 Gag, [[HIV]] HIV-1 Pol lacking the integrase domain, and at least the [[HIV]] gp120 protein and the membrane-spanning domain and ectodomain of [[HIV]] gp41 protein of HIV-1 Env, but lacking all or part of the eytoplamic cytoplasmic domain of gp41 protein whereby a CD8+ T cell immune response to an [[HIV]] HIV-1 Env, Gag or Pol antigen is induced.
  - 32. (Previously presented) The method of claim 31, wherein the primate is human.
- 33. (Currently amended) The method of claim 31, wherein the [[HIV]] <u>HIV-1</u> Pol expressed by the recombinant MVA virus has at least one amino acid change that inhibits reverse transcriptase activity.

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34. (Currently amended) The method of claim 31, wherein the [[HIV]] <u>HIV-1</u> Pol expressed by the recombinant MVA virus has at least one amino acid change that inhibits strand transfer activity.

35. (Currently amended) The method of claim 31, wherein the [[HIV]] <u>HIV-1</u> Pol expressed by the recombinant MVA virus has at least one amino acid change that inhibits RNaseH activity.

36-38. (Canceled)

39. (New) The method of claim 31 wherein recombinant MVA virus expresses HIV-1 gp41, lacking at least 115 amino acids of the cytoplasmic domain of gp41.